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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,837	02/28/2002	Kundan Singh	AP34069-070050.1929	1750
21003 7590 03/28/2007 BAKER & BOTTS L.L.P. 30 ROCKEFELLER PLAZA 44TH FLOOR NEW YORK, NY 10112-4498			EXAMINER TSEGAYE, SABA	
			ART UNIT	PAPER NUMBER
			2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/085,837	SINGH ET AL.	
	Examiner	Art Unit	
	Saba Tsegaye	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9,12-14,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 5, 10, 11, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to the amendment filed 1/30/2007. Claims 1-18 are pending. Claims 5, 10, 11, 15 and 16 are objected. Claims 1-4, 6-9, 12-14, 17 and 18 are rejected.

Claim Rejections - 35 USC § 103

2. Claims 1-4, 6, 9, 12-14, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe in view of Potekhin et al. (US 2002/0123895 A1).

Regarding claim 1, Knappe discloses, in Figs. 13A and 13B, a conferencing server (MCU) for establishing multi-party call conference services in a data network telephony system, comprising:

a media conferencing module (142), the media conferencing module comprising: a plurality of selectable media decoders (150, 84, 86);

a plurality of media stream queues (152, 90, 94) selectively coupled to said plurality of media decoders (150, 84, 86);

a jitter correction processor (152, 154, 90, 92, 94), the jitter correction processor compensating arrival time jitters in the data stored in the media stream queues (152, 90, 94; column 7, lines 6-19);

a mixer (158L, 158R, 160L, 160R, 102L, 102R), the mixer receiving the jitter corrected data from each of the queues (column 9, lines 8-32; column 14, lines 32-42); and

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a plurality of selectable media encoders (166, 168, 170), the selectable media encoders being selectively coupled to the individual participant conference streams (172, 174, 176) in accordance with a protocol supported by the respective participant (column 12, lines 15-21).

However, Knappe does not disclose a) a session initiation protocol-signaling interface and b) a single mixer, which aggregates conferencing streams of all active participants.

a) Knappe discloses that network interface 80 can comprise the entire protocol stack and physical layer hardware, an application deriver that receives Real time Transport Protocol (RTP) and control packets (column 6, lines 32-50). As known SIP sessions are simply packet streams of the RTP. Furthermore, Knappe discloses that the particular protocols used for signaling and voice data packet encapsulation are a matter of design choice (column 13, lines 45-48; column 15, lines 60-61, and line 67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a SIP in the system of Knappe in order to provide more flexible and faster services since (by using SIP) it is not necessary to define and map the interface beforehand.

b) Potekhin teaches a single mixer, which aggregates conferencing streams of all active participants (see figs. 1 and 2; paragraphs 0022, 0028).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a single mixer, such as that suggested by Potekhin, to the plurality mixers of Knappe in order to provide compact system that reduces the number of mixers needed to make the system.

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Regarding claim 2, Potekhin discloses the conferencing server wherein the individual participant conference streams are formed by subtracting a corresponding active participant audio stream from the aggregate conferencing stream (mixing unit 103 mixes the enhanced audio streams based on control instruction 95 and supplies a number of mixed audio streams according to the number of participants; paragraphs 0022, 0028).

Regarding claim 3, Knappe discloses the conferencing server wherein the media conferencing module determines at least one media CODEC protocol supported by each conference participant and wherein the selectable media decoders are configured in accordance with the media CODEC protocol (column 6, lines 54-62).

Regarding claims 6, 13 and 18, Knappe discloses the conferencing server wherein the jitter correction processor takes the form of a dynamic play-out delay algorithm (column 7, lines 6-19).

Regarding claims 9 and 14, Knappe discloses a method of conferencing a plurality of conference participant audio streams comprising:

identifying at least one media CODEC protocol for each conference participant (decoders can use any suitable codec upon which the system and the respective encoding endpoint successfully agree);

decoding each audio stream in accordance with a corresponding identified CODEC protocol (column 6, line 54-column 7, line 5);

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compensating each decoded audio stream for arrival time jitter (column 7, lines 6-19);
mixing each of the audio streams (column 9, lines 26-32; column 14, lines 32-42);
for each active participant, subtracting that participant's audio stream from the aggregate audio stream to generate a corresponding participant conference stream (column 12, lines 36-43);
encoding each participant conference stream in accordance with an identified CODEC protocol for the participant (see Fig. 13B; column 12, lines 45-55); and
delivering the encoded participant conference streams to the corresponding participants (column 12, lines 45-55).

However, Knappe does not disclose a single mixer, which aggregates conferencing streams of all active participants.

Potekhin teaches a single mixer which aggregates conferencing streams of all active participants (see figs. 1 and 2; paragraphs 0022, 0028).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a single mixer, such as that suggested by Potekhin, to the plurality mixers of Knappe in order to provide compact system that reduces the number of mixers needed to make the system.

Regarding Claims 4, 12 and 17 Knappe does not expressly disclose codec protocols are determined in accordance with SIP INVITE request messages received from conference participants. However, Knappe does disclose that packet is encapsulated with lower layer headers, such as an IP header appropriate for the encoder's link to packet network 32. Knappe, further, suggests that different networks may be used to reach different endpoints. The particular

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protocols used for singling and voice data packet encapsulation are a matter of design choice (column 13, lines 42-48). As known, for handling call or session setup and tear down in an IP network is the session initiation protocol (SIP). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use SIP INVITE request messages in the method of Knappe since the SIP protocol is sufficient to handle most calls setup, connect, and release related signaling.

3. Claims 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Knappe in view of Potekhin as applied to claim 1 above, and further in view of Kwan (US 2005/0025073 A1).

Knappe in view of Potekhin discloses all the claim limitations as stated above, except for a SIP to H.323 and a SIP to PSTN protocol gateway interface operatively coupled to the media conferencing module.

Kwan teaches, in Fig. 1, gateways 112 are coupled to MCU site. Each gateway 112 could be dedicated to, and support connections from, a specific type of client 102 or user 110 using whatever equipment and protocol ((e.g., PSTN, SIP, H.323, etc.), see [0030; 0036]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a SIP to H.323 and a SIP to PSTN protocol gateway interface, such as suggested by Kwan, to the system of Knappe in order to provide voice conferencing system of several users from different geographic locations with different communications network simultaneously.

Allowable Subject Matter

4. Claims 5, 10, 11, 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 01/30/07 have been fully considered but they are not persuasive. Applicant argues "*one of ordinary skill in the art would have neither the motivation for nor a reasonable expectation of success in combining Potekhin with Knappe to form the combination*". Examiner respectfully disagrees. The Examiner still contends that combining the teachings of Potekhin with the teachings of Knappe makes the overall system more compact and reduces the number of components. This motivation is a reasonable and convincing reason for some one in the art to combine Potekhin with Knappe to form the combination of claim 1.

Applicant also argues "*...the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art...*" However, the motivation for combining two elements does not have to originate the reference itself. The test for obviousness is whether a person of ordinary skill in the art would have been motivated to combine the elements at the time of the invention. Knappe discloses, in fig. 13A, that "a separate set of mixers is provided for each endpoint, so each can receive mapped and mixed voice data **from all other endpoints.**" As shown in fig. 13a, for example, **mixer 158L** mixes each channel from channel Mappers (156, 96, 98) to form a first set of mixed channels **162L (an aggregate conferencing stream)**. Applicant, further, argues that Potekhin fails to disclose or suggest,

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“generating an aggregate conferencing stream of all active participants”. Examiner respectfully disagrees. Potekhin clearly teaches a single mixer which aggregates conferencing streams **of all** active participants (see figs. 1 and 2; paragraphs 0022, 0028).

Regarding claims 9-13, Applicant argues, *“Knappe and Potekhin fail to disclose or suggest mixing “each” of the streams into an “aggregate stream.”* Moreover, *“Knappe and Potekhin fail to disclose or suggest subtracting a participant’s audio stream from the aggregate audio stream to generate a corresponding participant conference stream for each active participant.”* Examiner respectfully disagrees. Potekhin clearly teaches a Mixer 310 (see figs. 2 and 3) that mixes audio streams 96a-c and produces a mixed streams 98a-c. Each mixed stream is sent to at least one appropriate participant within conference. Each mixed stream 98a-c may exclude the audio signals that originated from the same participant. The appropriate one or more of codecs 202a-c then retrieves the appropriate mixed stream 98a-c (see 0028).

Applicant further, argues that *“in Knappe there is no aggregate stream including all participants’ streams as recited in Applicant’s claim 9”*. It is respectfully submitted that the rejection is based on the combined teaching of the Knappe reference and the Potekhin reference, and that the Potekhin reference, as pointed above does teach this feature.

Refereeing to the arguments on pages 6-7, about the limitations in claims 7-8 and 14-18, these arguments are similar to the arguments presented above; the Examiner takes the same position as discussed from claims 1 and 9.

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Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ST

March 20, 2007


CHI PHAM
SUPERVISORY PATENT EXAMINER
3/27/07